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STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING DISTRICT OFFICE

GRETCHEN WHITMER
GOVERNOR

EGLE

LIESL EICHLER CLARK
DIRECTOR

October 30, 2019

CERTIFIED MAIL—7018 0360 0000 2598 8458
RETURN RECEIPT REQUESTED

Mr. Scott Wright
Diamond Chrome Plating Inc.
604 South Michigan Avenue
P.O. Box 557
Howell, Michigan 48844

Dear Mr. Wright:

SUBJECT: Request for Modification of the Volatilization to Indoor Air Pathway Work Plan for Diamond Chrome Plating, 604 South Michigan Avenue, Howell, Livingston County, Michigan; Facility ID No.: 47000202, First Amended Consent Decree-Ingham Circuit Court File No.: 03-1862-CE (FACD)

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD), Lansing District Office, has reviewed Diamond Chrome Plating's (DCP) September 27, 2019, e-mail transmittal of third quarter soil gas, indoor air, and semi-quantitative trichloroethylene (TCE) gas phase data collected August 7 and 8, 2019, by a HAPSITE Plus portable gas chromatograph-mass spectrometer (GC-MS). DCP's transmittal did not include the lab data, field notes, meteorological data, and other technical information that is anticipated to be included in DCP's quarterly progress report due November 1, 2019.

DCP's tabulated soil gas, indoor air, and HAPSITE Plus data support the following conclusions regarding TCE and vinyl chloride vapors found in the subsurface, indoor, and ambient air within the DCP plant and in the vicinity of the DCP plant:

- TCE was detected above its 2.0 ug/m3 recommended volatilization to indoor air interim action screening level (RIASL) for residential and non-residential scenarios for 15 of 29 indoor samples collected for laboratory analysis at eight locations north and south of the DCP plant.

- TCE was detected above its RIASL for three of four ambient air samples collected for laboratory analysis near DCP's property line and at 190 ug/m3 from DCP's roof vent #70.

- TCE or vinyl chloride (VC) was detected in soil gas well samples collected for laboratory analysis south of the DCP plant above the site-specific criterion in six of ten samples.

- TCE was not detected above its 67 ug/m3 site-specific criterion in any of the sub-slab soil gas well samples submitted for laboratory analysis. TCE was detected above its reporting limit in 2 of 25 samples for eight properties north and south of the DCP plant.

- VC in soil gas submitted for laboratory analysis was detected at 1,600 ug/m3, which is above its 450 ug/m3 its site-specific criterion for non-residential use. This soil gas well is less than 50 feet from a non-residential structure. The residential structure near this soil gas well was recently demolished.

- TCE in soil gas wells submitted for laboratory analysis was detected above its site-specific criterion in two businesses south of the DCP plant less than 50 feet from the structures. Access has not been granted to evaluate soil gas under these structures.

- The HAPSITE Plus TCE semi-quantitative data collected on August 7 and August 8, 2019, indicates strong TCE ambient air sources, up to 2,208 ug/m3, are active inside the DCP plant that are venting from the vicinity of the degreaser via DCP's roof vents.

- HAPSITE Plus data from MW-508 headspace indicates that TCE is present many times above its site-specific criterion under the DCP plant.

- HAPSITE Plus data from DCP's active and inactive sanitary sewer lines and floor drains indicates that TCE is present in sanitary sewer vapors emanating up to 378 ug/m3.

- HAPSITE Plus data collected from a bathroom floor sanitary sewer clean-out at a property south of DCP plant indicated TCE concentrations of 205 ug/m3.

- HAPSITE Plus data from active and inactive sanitary sewer clean-outs, floor drains, and sumps for five other off-property residential and business locations up to 5.31 ug/m3 with similar concentrations of TCE detected by the HAPSITE Plus in ambient air near a residence east of the DCP plant at 5.045 ug/m3.

- HAPSITE Plus data collected from sanitary sewers off property is inconclusive, because it is not correlated to one or more TCE vapor sources and collected after elevated TCE concentrations were detected at the DCP plant.

While DCP continues to coordinate with Air Quality Division (AQD) on matters related to its vapor degreaser compliance issues, the data evaluation indicates that the volatilization to indoor air pathway (VIAP) from subsurface utility corridors, soil, and groundwater vapor sources is still a relevant exposure pathway for TCE to the surrounding area and remains undefined as to aerial extent. The VIAP evaluation includes obtaining access from the two non-residential properties referenced above located where soil gas concentrations of TCE and VC exceed site-specific criteria within the U.S. Environmental Protection Agency recommended exclusion zone of 100 feet. This additional investigation is necessary to meet performance objectives detailed in Section 6.1 of the FACD.

Present indoor air and outdoor ambient air data indicate TCE vapors emanate from the DCP plant to the residential and commercial areas proximate to the DCP plant in concentrations that may pose a risk to area residents. In consultation with the Michigan Department of Health and Human Services (MDHHS) and the Livingston County Health Department, EGLE requests DCP to immediately complete the evaluation of the volatilization to indoor air pathway to determine and implement engineering controls necessary to abate risks from TCE vapors from the subsurface migration pathways and coordinate efforts regarding the vapor degreaser with staff from AQD.

EGLE RRD requests DCP continue quarterly sampling of vapor pins and soil gas wells beyond one year until the evaluation of TCE and related vapor contamination from soil gas, active and inactive sanitary sewers, sewer leads, clean-outs, and sumps in residential areas is completed. To accomplish this, EGLE requests that the HAPSITE Plus portable GC-MS be utilized in a second mobilization to evaluate contributions of TCE from the subsurface utilities versus off-property ambient air and ambient air sources.

The HAPSITE Plus mobilization should focus on evaluating TCE in ambient air and subsurface chlorinated solvent vapor sources including sanitary sewers to identify areas off property that should be included in future quarterly sampling events and otherwise evaluated for public health concerns. The city of Howell has requested that DCP contact its Department of Public Works five days in advance of investigating sewers with the HAPSITE Plus.

The HAPSITE Plus data should also be verified by laboratory data from pressurized bottle samplers (bottle vacs) collecting duplicate samples. This request is in addition to DCP's compliance evaluation of TCE vapors emanating to the outdoors (TCE in ambient air) from its vapor degreaser and degreasing process. At all times during data collection, meteorological data such as wind direction, rain events, and barometric pressure must be collected. EGLE recommends that DCP contact the White Lake National Service Station to request a point forecast to optimize scheduling of the HAPSITE Plus. In addition, DCP's utility maps must also be updated to include all active and inactive sanitary sewer leads into residences and commercial structures within the current study area.

Due to the technical issues, scope of work, and public health concerns, DCP is urged to meet RRD, AQD, and MDHHS staff prior to the November VIAP quarterly sampling event, to commit resources to immediately address public health concerns and meet the performance objectives of the FACD.

Please reply to this correspondence by scheduling the requested meeting with EGLE staff. If you have any technical questions regarding this communication, please contact Ms. Rebecca Taylor at 517-284-5160, or taylorr@michigan.gov. Please contact me at 517-284-5123, or labrecqued@michigan.gov to schedule a meeting.

Sincerely,

David LaBrecque
Assistant District Supervisor
Lansing District Office
Remediation and Redevelopment Division
517-284-5123
labrecqued@michigan.gov

cc: Mr. Matt Bolang, Livingston County Health Department
Mr. Erv Suida, City of Howell
Mr. Todd Fracassi, Pepper Hamilton LLP
Mr. Jim Colmer, BB&E
Ms. Celeste Holtz, BB&E
Mr. Brian Negele, Michigan Department of Attorney General
Ms. Lisa Quiggle, MDHHS
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